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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,780	04/30/2001	Brian T. Murren	GE1-007US	4333
21718	7590	06/15/2005	EXAMINER	
LEE & HAYES PLLC SUITE 500 421 W RIVERSIDE SPOKANE, WA 99201			EL CHANTI, HUSSEIN A	
			ART UNIT	PAPER NUMBER
			2157	

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/845,780

Applicant(s)

MURREN ET AL.

Examiner

Hussein A. El-chanti

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Amendment

1. This action is responsive to amendment received on March 30, 2005. Claim 9 was amended. Claims 30-32 were newly added. Claims 1-32 are pending examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Immerman et al., U.S. Patent No. 6,785,721 (referred to hereafter as Immerman).

As to claim 1, Immerman teaches a server system, comprising:

one or more computers;

an application executing on the computers to receive and process client requests (see col. 5 lines 24-52); and

a constraint system to constrain operation of the application according to multiple different constraints, the constraint system comprising a hierarchy of constraint layers, with each constraint layer containing a set of one or more constraints that customize operation of the application (see col. 5 lines 53-col. 6 lines 10 and col. 5 lines 3-20).

As to claim 2, Immerman teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains legally mandated constraints to constrain operation of the application according to legal principles (see col. 5 lines 3-20 and col. 6 lines 42-69 and col. 10 lines 30-col. 11 lines 28).

As to claim 3, Immerman teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains company-mandated constraints to constrain operation of the application according to preferences of a company that operates the application (see col. 10 lines 30-col. 11 lines 28).

As to claim 4, Immerman teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains customer constraints to constrain operation of the application according to preferences of customers (see col. 18 lines 59-col. 19 lines 62).

As to claim 5, Immerman teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains cultural constraints to constrain operation of the application according to cultural aspects (see col. 18 lines 59-col. 19 lines 62).

As to claim 6, Immerman teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains end user constraints to constrain operation of the application according to preferences of an end user (see col. 18 lines 59-col. 19 lines 62).

As to claim 7, Immerman teaches a server system as recited in claim 1, where in the constraint layers are organized within the hierarchy such that a first constraint layer limits a second constraint layer but the second constraint layer does not limit the first constraint layer (see col. 5 lines 53-col. 6 lines 10).

As to claim 8, Immerman teaches a server system as recited in claim 1, further comprising a constraint resolver to resolve the constraint layers so that operation of the application is constrained by a sum of the constraints in the layers (see col. 5 lines 53-col. 6 lines 10).

AS to claim 9, Immerman teaches a server system comprising:

one or more computers; and

a multi-layer application executing on the computers to handle client requests, the multi-layer application comprising:

a problem-solving logic layer to process the client requests according to an associated problem domain, the problem-solving logic layer containing one or more execution models to perform various sets of tasks when processing the client requests, the problem-solving logic layer producing replies to the client requests; a presentation layer to structure the replies produced by the problem-solving logic layer in a manner that makes them presentable on various client devices (see col. 5 lines 53-col. 6 lines 10 and col. 5 lines 3-20); and

a constraint hierarchy of multiple constraint layers, each constraint layer containing a set of one or more constraints that specify how the replies should be structured to customize the replies for specific sets of conditions (see col. 5 lines 3-20 and col. 6 lines 42-69 and col. 10 lines 30-col. 11 lines 28).

As to claim 10, Immerman teaches a server system as recited in claim 9, wherein constraint layers can be selectively added or removed from the constraint hierarchy independently of other layers in the multi-layer application to produce different sets of constraints (see col. 5 lines 3-20 and col. 6 lines 42-69 and col. 10 lines 30-col. 11 lines 28).

As to claim 11, Immerman teaches a server system as recited in claim 9, wherein the constraint hierarchy comprises a constraint layer that contains legally mandated constraints that constrain the presentation layer to structure the replies to comply with certain legal principles (see col. 5 lines 3-20 and col. 6 lines 42-69 and col. 10 lines 30-col. 11 lines 28).

As to claim 12, Immerman teaches a server system as recited in claim 9, wherein the constraint hierarchy comprises a constraint layer that contains company-mandated constraints that constrain the presentation layer to structure the replies according to preferences of a company that operates the application (see col. 10 lines 30-col. 11 lines 28).

As to claim 13, Immerman teaches a server system as recited in claim 9, wherein the constraint hierarchy comprises a constraint layer that contains customer-oriented

constraints that constrain the presentation layer to structure the replies according to preferences of customers (see col. 10 lines 30-col. 11 lines 28).

As to claim 14, Immerman teaches a server system as recited in claim 9, wherein the constraint hierarchy comprises a constraint layer that contains cultural constraints that constrain the presentation layer to structure the replies according to cultural aspects (see col. 10 lines 30-col. 11 lines 28).

As to claim 15, Immerman teaches a server system as recited in claim 9, wherein the constraint hierarchy comprises a constraint layer that contains end user constraints that constrain the presentation layer to structure the replies according to preferences of end users (see col. 10 lines 30-col. 11 lines 28).

As to claim 16, Immerman teaches a server system as recited in claim 9, wherein the constraint layers can be removed or added to modify the set of constraints imposed on structuring the replies (see col. 10 lines 30-col. 11 lines 28).

As to claim 17, Immerman teaches a computer software architecture embodied on one or more computer-readable media, comprising:

a constraint hierarchy of multiple constraint layers, each constraint layer containing a set of one or more constraints that constrain operation of an application, the constraint layers being organized within the constraint hierarchy such that a first constraint layer limits a second constraint layer but the second constraint layer does not limit the first constraint layer (see col. 5 lines 53-col. 6 lines 10 and col. 5 lines 3-20);
and

a constraint resolver to resolve the constraint layers so that operation of the application is constrained by a set of the constraints in the constraint layers (see col. 5 lines 3-20 and col. 6 lines 42-69 and col. 10 lines 30-col. 11 lines 28).

As to claim 18, Immerman teaches a computer software architecture as recited in claim 17, wherein constraint layers are selectively added to or removed from the constraint hierarchy to form different sets of constraints on the operation of the application (see col. 10 lines 30-col. 11 lines 28).

As to claim 19, Immerman teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains legally mandated constraints to constrain operation of the application according to legal principles (see col. 10 lines 30-col. 11 lines 28).

As to claim 20, Immerman teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains company-mandated constraints to constrain operation of the application according to preferences of a company that operates the application (see col. 10 lines 30-col. 11 lines 28).

As to claim 21, Immerman teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains customer constraints to constrain operation of the application according to preferences of customers (see col. 10 lines 30-col. 11 lines 28).

As to claim 22, Immerman teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains cultural constraints to constrain operation of the application according to cultural aspects (see col. 10 lines 30-col. 11 lines 28).

As to claim 23, Immerman teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains end user constraints to constrain operation of the application according to preferences of an end user (see col. 10 lines 30-col. 11 lines 28).

As to claim 24, Immerman teaches a method comprising: storing a hierarchy of constraints, each constraint being configured to constrain operation of a server application; and evaluating an operation of the server application in view of the hierarchy of constraints to modify operation according to the constraints in the hierarchy (see col. 10 lines 30-col. 11 lines 28).

As to claim 25, Immerman teaches a method as recited in claim 24, further comprising adding or removing constraints from the hierarchy to alter operation of the server application (see col. 10 lines 30-col. 11 lines 28).

As to claim 26, Immerman teaches a method as recited in claim 24, wherein the hierarchy of constraints comprises constraints selected from a group of constraints comprising: legally mandated constraints to constrain operation of the application according to legal principles; company-mandated constraints to constrain operation of the application according to preferences of a company that operates the application;

customer constraints to constrain operation of the application according to preferences of customers; cultural constraints to constrain operation of the application according to cultural aspects; and end user constraints to constrain operation of the application according to preferences of an end user (see col. 10 lines 30-col. 11 lines 28).

As to claim 27, Immerman teaches a method for operating a server application, comprising:

receiving requests from multiple clients; processing the requests to produce replies; structuring the reply to define how the reply will appear when presented at the client; and constraining said structuring according to a set of one or more constraints to customize appearance of the reply,

the constraints comprising: legally mandated constraints to constrain appearance of the reply according to legal principles; company-mandated constraints to constrain appearance of the reply according to preferences of a company that operates the application; customer constraints to constrain appearance of the reply according to preferences of customers;

cultural constraints to constrain appearance of the reply according to cultural aspects; and

end user constraints to constrain appearance of the reply according to preferences of an end user (see col. 5 –col. 6 and col. 10-col. 11).

As to claim 28, Immerman teaches a method as recited in claim 27, further comprising adding or removing constraints to change the set of constraints being applied to the structuring of the reply (see col. 5 –col. 6 and col. 10-col. 11).

As to claim 29, Immerman teaches one or more computer-readable media comprising computer-executable instructions that, when executed, direct an application server to:

generate replies in response to client requests; and structure the replies according to a hierarchy of constraints to customize the replies, the constraints comprising a combination of one or more following constraints: legally mandated constraints to constrain appearance of a reply according to legal principles; company-mandated constraints to constrain appearance of the reply according to preferences of a company that operates the application; customer constraints to constrain appearance of the reply according to preferences of customers; cultural constraints to constrain appearance of the reply according to cultural aspects; and end user constraints to constrain appearance of the reply according to preferences of an end user (see col. 5 – col. 6 and col. 10-col. 11).

As to claim 30, Immerman teaches the server system as recited in claim 1, wherein the constraints are expressed as metadata (see col. 10 lines 30-col. 11 lines 63).

As to claim 31, Immerman teaches the server system as recited in claim 1, wherein the constraints of constraint layer can have the effect of overriding the constraints of another lower constraint layer (see col. 10 lines 30-col. 11 lines 63).

As to claim 32, Immerman teaches the server system as recited in claim 1 wherein the constraints define presentation aspects of a reply sent to a customer (see col. 10 lines 30-col. 11 lines 63).

Response to Arguments

3. Applicant's arguments filed have been fully considered but they are not persuasive.

In the remarks, the applicant argues in substance that; A) Immerman does not disclose a constraint system comprising a hierarchy of constraint layers.

In response to A) Immerman teaches a method and system comprising A local run time model comprises a hierarchy of models including object data store model, security model, indexing model, replication model, agent workflow model and mail model. DOLS provides a layered security model that allows flexibility for controlling access to all or part of an application. The highest level of security is managed through a database access control list (ACL). Further refinements within the security model provide access to specific documents, and their views, forms or folders, and include read access lists, write access lists, form access lists and readers and authors fields. (see abstract). There is no limitation in the claim on the functionality of the constraint or how the constraint customizes the operation of the application and therefore Immerman

meets the scope of the claimed limitation "a constraint system comprising a hierarchy of constraint layers that customizes the operation of the application".

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein A. El-chanti whose telephone number is (571)272-3999. The examiner can normally be reached on Mon-Fri 8:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hussein El-chanti

June 6, 2005


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